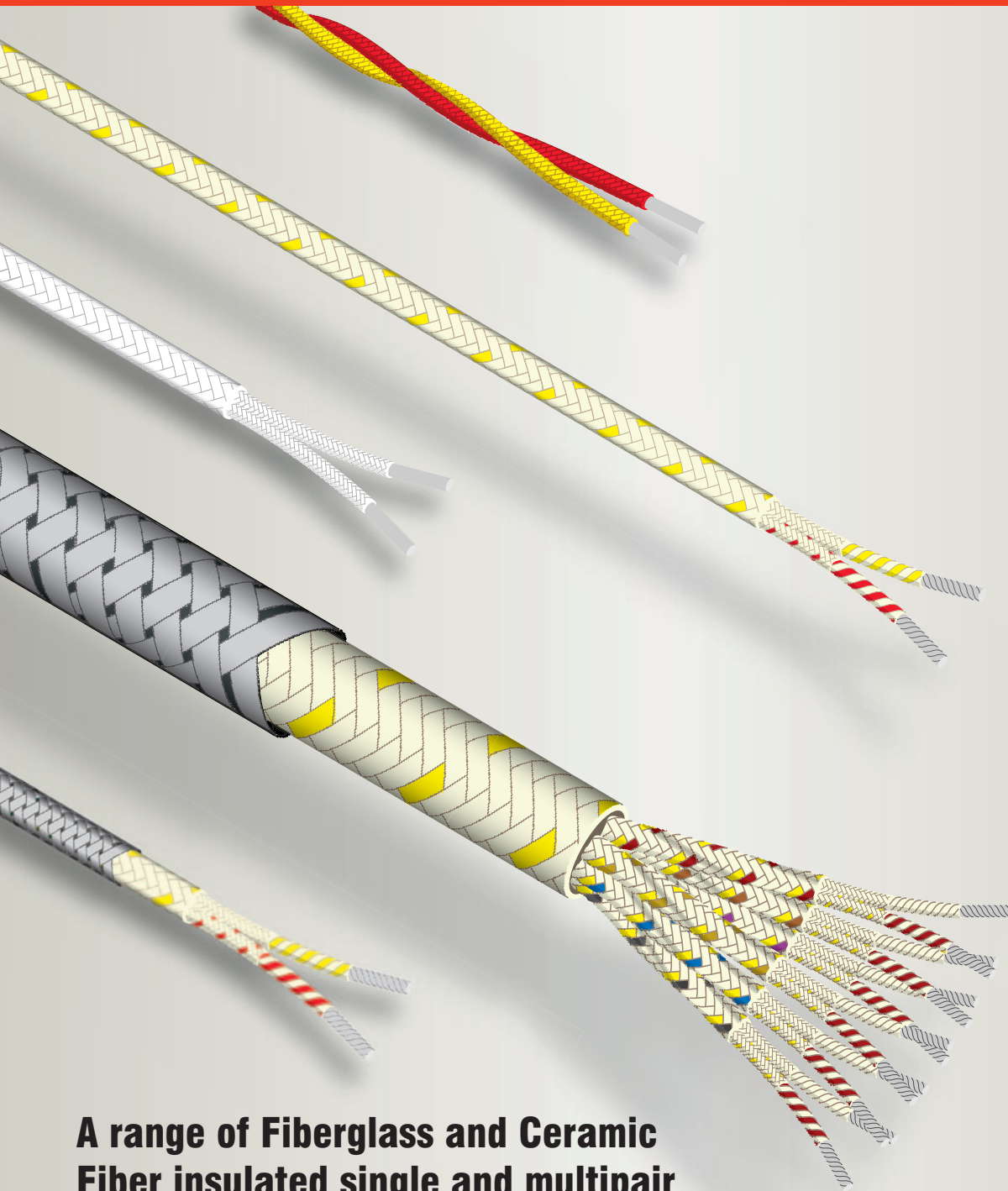




Thermocouple Extension Grade Wire - Single and Multipair Fiberglass and Ceramic Fiber Insulated



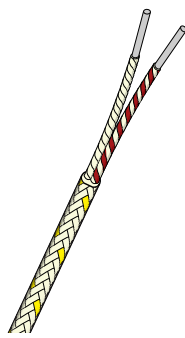
**A range of Fiberglass and Ceramic
Fiber insulated single and multipair
Thermocouple Extension Grade Wire
available from stock for immediate
delivery**

TC for Temperature Sensing, Measurement and Control

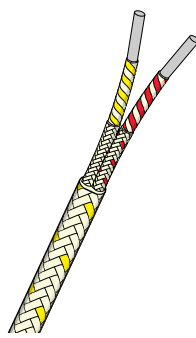
Fiberglass Thermocouple Extension Grade Wire

Fiberglass Insulated Parallel Construction Wire for use up to +900°F or 1475°F

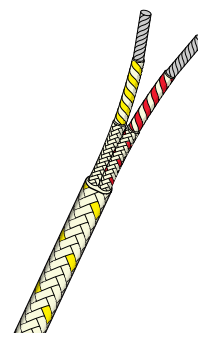
- Excellent for high temperature applications up to 900°F we also offer High Temperature Fiberglass (1475°F) and Ceramic Fiber (2190°F)
- Suitable for use at normal air ambient temperatures where there is a possibility of a hot spot which might damage lower rated wire such as PVC or PFA
- Parallel construction with either solid or stranded conductors in a range of sizes. Ideal for general purpose high temperature applications
- For Fiberglass Multipairs see page 6



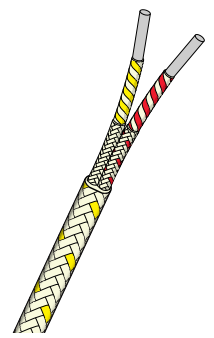
Basic Fiberglass Parallel Twin
One pair of **solid** conductors. Cores double glass fiber lapped and varnished. Parallel construction, glass fiber braided overall and varnished.



Fiberglass Parallel Twin
One pair of **solid** conductors. Cores double glass fiber lapped, braided and varnished. Parallel construction, glass fiber braided overall and varnished.



Fiberglass Parallel Twin
One pair of **stranded** conductors. Cores double glass fiber lapped, braided and varnished. Parallel construction, glass fiber braided overall and varnished.



High Temperature Fiberglass Parallel Twin
One pair of **solid** conductors. Cores double HT glass fiber lapped, braided and varnished. Parallel construction, glass fiber braided overall and varnished.

Stock Number		C05	C09	C10	C20	C30	C40	C50	C51	C52	C53	C76	C77	C70	
CONDUCTORS	Wire Type (number of strands x AWG)	Solid	Solid	Solid	Solid	Solid	7x32	13x32	23x32	32x32	40x32	Solid	Solid	Solid	
	Total Wire Size - AWG (S = Stranded)	32	28	28	24	20	24S	21S	19S	17S	16S	24	20	16	
	Total Area (mm ²)	0.03	0.07	0.07	0.2	0.5	0.22	0.44	0.75	1.0	1.3	0.2	0.5	1.3	
	Insulation	Fiberglass		Fiberglass		Fiberglass						High Temp. Fiberglass			
PAIRS	Number of Pairs	1		1		1						1			
	Conductor Configuration	Parallel		Parallel		Parallel						Laid Flat			
	Shielded	No		No		No						No			
OVERALL	Insulation	Fiberglass		Fiberglass		Fiberglass						High Temp. Fiberglass			
	Insulation Rating (°F)	Continuous		+900		+900						+1475			
		Short Term		+1000		+1000						—			
	Color Coding	Yes		Yes		Yes						Yes			
	Physical Properties	Abrasion Resistance		Fair		Fair						Fair			
		Moisture Resistance		None		None						None			
		Typical Weight (lbs/1000ft) (excluding reel)		7	7	7	7	14	7	14	21	28	28	7	14
	Diameter under Armor (inches)	—		—		—						—			
	Diameter over Armor (inches)	—		—		—						—			
	Overall Diameter [†] (inches)	0.04"x0.08"	0.04"x0.08"	0.04"x0.08"	0.08"x0.12"	0.08"x0.12"	0.08"x0.12"	0.08"x0.12"	0.08"x0.12"	0.12"x0.16"	0.12"x0.16"	0.16"x0.20"	0.08"x0.12"	0.08"x0.12"	0.16"x0.24"
Notes		Above 180°C the integrity of the wire is maintained to the upper insulation rating limit provided the wire is not flexed particularly when cold.													
		Above 350°F the integrity of the wire is maintained to the upper insulation rating limit provided the wire is not flexed particularly when cold.													

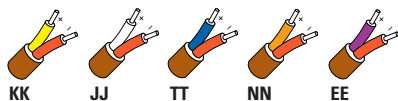
[†] These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Color Codes available Extension Grade to ANSI MC96.1



ALSO AVAILABLE as Thermocouple Grade to ANSI MC96.1



Order Code - Example

Stock No.	Thermocouple Type	Color Code
C40	- KX	- ANSI

Thermocouple wire is available in the following types: KX, JX, TX, NX, EX, SX or RX. Other less popular thermocouple types are available on request.

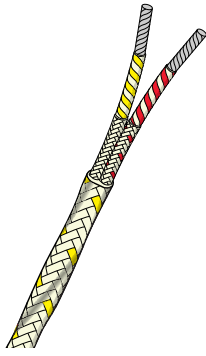
Thermocouple wire is normally available from us for **immediate** delivery from stock to ANSI MC96.1 colour coding.

IEC colors are available on request

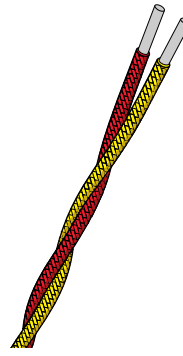
Fiberglass Thermocouple Extension Grade Wire

Fiberglass Insulated Twisted Wire for use up to +900°F or 1475°F

- Excellent for high temperature applications up to 900°F we also offer High Temperature Fiberglass (1475°F) and Ceramic Fiber (2190°F)
- Suitable for use at normal air ambient temperatures where there is a possibility of a hot spot which might damage lower rated wire such as PVC or PFA
- Twisted construction with either solid or stranded conductors in a range of sizes. Ideal for general purpose high temperature applications or simple thermocouple sensors
- For Fiberglass Multipairs see page 6



Fiberglass Twisted Pair
One pair of **stranded** conductors. Cores double glass fiber lapped, braided and varnished. Pair twisted, glass fiber braided overall and varnished.



High Temperature Fiberglass Insulated Twisted Pair
One pair of solid conductors. Each conductor HT glass fiber braided. Pair varnished and twisted.

Stock Number		C37	C38	C27
CONDUCTORS	Wire Type (number of strands x AWG)	7x32	13x32	Solid
	Total Wire Size - AWG (S = Stranded)	24S	21S	21
	Total Area (mm ²)	0.22	0.44	0.4
	Insulation	Fiberglass		High Temperature Fiberglass
PAIRS	Number of Pairs	1		1
	Conductor Configuration	Twisted		Twisted
	Shielded	No		No
OVERALL	Insulation	Fiberglass		—
	Insulation Rating (°F)	Continuous	+900	+1475
		Short Term	+1000	—
	Color Coding	Yes		Yes
	Physical Properties	Abrasion Resistance	Fair	Fair
		Moisture Resistance	None	None
		Typical Weight (lbs/1000ft) (excluding reel)	7	7
	Diameter under Armor (inches)	—		—
	Diameter over Armor (inches)	—		—
	Overall Diameter [†] (inches)	0.12"	0.16"	0.12"
Notes		Rejects electromagnetic interference. Above 180°C the integrity of the wire is maintained to the upper insulation rating limit provided the wire is not flexed particularly when cold.		Rejects electromagnetic interference. Above 180°C the integrity of the wire is maintained to the upper insulation rating limit provided the wire is not flexed particularly when cold.

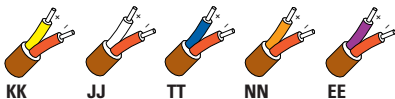
[†] These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Color Codes available Extension Grade to ANSI MC96.1



ALSO AVAILABLE as Thermocouple Grade to ANSI MC96.1



Order Code - Example

Stock No.	Thermocouple Type	Color Code
C37	- KX	- ANSI

Thermocouple wire is available in the following types: KX, JX, TX, NX, EX, SX or RX. Other less popular thermocouple types are available on request.

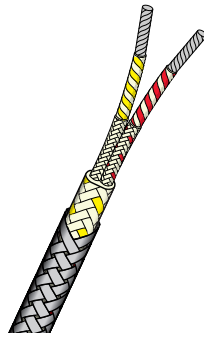
Thermocouple wire is normally available from us for **immediate** delivery from stock to ANSI MC96.1 colour coding.

IEC colors are available on request

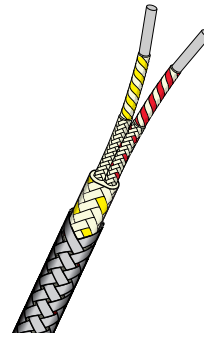
Fiberglass Thermocouple Extension Grade Wire

Stainless Steel Braided Fiberglass Insulated Parallel Construction Wire for use up to +900°F or 1475°F

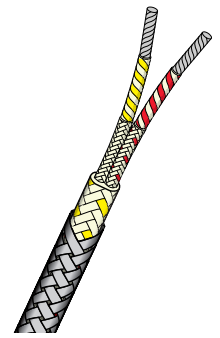
- Excellent for high temperature applications up to 900°F we also offer High Temperature Fiberglass (1475°F) and Ceramic Fiber (2190°F)
- Suitable for use at normal air ambient temperatures where there is a possibility of a hot spot which might damage lower rated wire such as PVC or PFA
- Stainless Steel braided for mechanical protection
- For Fiberglass Multipairs see page 6



Fiberglass Parallel Twin with Stainless Steel Braid
One pair of **stranded** conductors. Cores double glass fiber lapped, braided and varnished. Parallel construction, glass fiber braided and varnished. Stainless steel wire braided overall.



High Temperature Fiberglass Parallel Twin with Stainless Steel Braid
One pair of **solid** conductors. Cores double HT glass fiber lapped, braided and varnished. Parallel construction, HT glass fiber braided & varnished. Stainless steel wire braided overall.



High Temperature Fiberglass Parallel Twin with Stainless Steel Braid
One pair of **stranded** conductors. Cores double HT glass fiber lapped, braided and varnished. Parallel construction, HT glass fiber braided & varnished. Stainless steel wire braided overall.

Stock Number		C60	C65	C66	C67	C68	C78	C79	C71	C80
CONDUCTORS	Wire Type (number of strands x AWG)	7x32	13x32	23x32	32x32	40x32	Solid	Solid	Solid	13x32
	Total Wire Size - AWG (S = Stranded)	24S	21S	19S	16S	16S	24	20	16	21S
	Total Area (mm ²)	0.22	0.44	0.75	1.0	1.3	0.2	0.5	1.3	0.44
	Insulation	Fiberglass					High Temperature Fiberglass		High Temperature Fiberglass	
PAIRS	Number of Pairs	1					1		1	
	Conductor Configuration	Parallel					Parallel		Parallel	
	Shielded*	Yes					Yes		Yes	
OVERALL	Insulation	Fiberglass					High Temperature Fiberglass		High Temperature Fiberglass	
	Insulation Rating (°F)	Continuous					+1475		+1475	
		Short Term					—		—	
	Color Coding	Yes					Yes		Yes	
	Physical Properties	Abrasion Resistance					Good		Good	
		Moisture Resistance					None		None	
		Typical Weight (lbs/1000ft) (excluding reel)					14	21	34	14
	Diameter under Armor (inches)	—					—		—	
	Diameter over Armor (inches)	—					—		—	
	Overall Diameter† (inches)	0.12"x 0.16"	0.12"x 0.16"	0.16"x 0.20"	0.16"x 0.20"	0.16"x 0.24"	0.12"x0.16"	0.12"x0.16"	0.20"x0.28"	0.12"x0.16"
Notes		Above 180°C the integrity of the wire is maintained to the upper insulation rating limit provided the wire is not flexed particularly when cold.					Above 180°C the integrity of the wire is maintained to the upper insulation rating limit provided the wire is not flexed particularly when cold.		Above 180°C the integrity of the wire is maintained to the upper insulation rating limit provided the wire is not flexed particularly when cold.	

* Where wire incorporate a metal braid, the braid can be used as a shield.

† These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Color Codes available Extension Grade to ANSI MC96.1



ALSO AVAILABLE as Thermocouple Grade to ANSI MC96.1



Order Code - Example

Stock No.	Thermocouple Type	Color Code
C60	- KX	- ANSI

Thermocouple wire is available in the following types: KX, JX, TX, NX, EX, SX or RX. Other less popular thermocouple types are available on request.

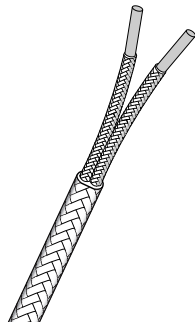
Thermocouple wire is normally available from us for **immediate** delivery from stock to ANSI MC96.1 colour coding.

IEC colors are available on request

Ceramic Fiber Thermocouple Extension Grade Wire

Ceramic Fiber Insulated Parallel Construction Wire for use up to +2190°F

- Ceramic fiber is excellent for very high temperature applications up to 2190°F
- Suitable for use at high air ambient temperatures where Fiberglass wire are not suitable
- Parallel construction



Ceramic Fiber Parallel Twin
One pair of **solid** conductors. Cores ceramic fiber braided and impregnated with a ceramic binder. Parallel construction, ceramic fiber braided overall, impregnated with a ceramic binder.

Stock Number		D20
CONDUCTORS	Wire Type (number of strands x AWG)	Solid
	Total Wire Size - AWG (S = Stranded)	20
	Total Area (mm ²)	0.5
	Insulation	Ceramic Fiber
PAIRS	Number of Pairs	1
	Conductor Configuration	Parallel
	Shielded	No
OVERALL	Insulation	Ceramic Fiber
	Insulation Rating (°F)	Continuous
		Short Term
	Color Coding	No
	Physical Properties	Abrasion Resistance
		Moisture Resistance
		Typical Weight (lbs/1000ft) (excluding reel)
	Diameter under Armor (inches)	—
	Diameter over Armor (inches)	—
	Overall Diameter [†] (inches)	0.08"x0.12"
Notes		Outstanding high temperature performance. Requires free circulation of air. Do not use in a vacuum.

[†] These values are nominal and if critical to your application, please request a physical check.

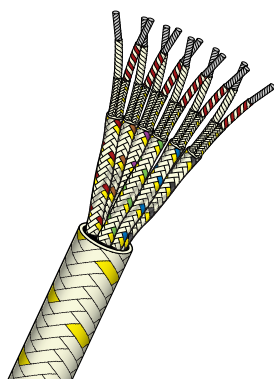
The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Order Code - Example		
Stock No.	Thermocouple Type	
D20	-	KX
Thermocouple wire is available in the following types: KX, JX, TX, NX, EX, SX or RX. Other less popular thermocouple types are available on request.		

Fiberglass Thermocouple Extension Grade Wire

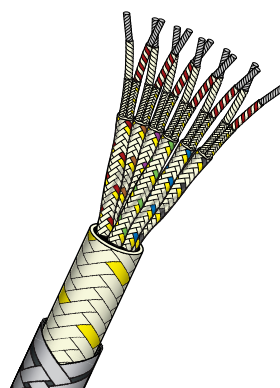
Fiberglass Insulated Multipair Cable for use up to +900°F

- Excellent for high temperature applications up to 900°F
- Suitable for use at normal air ambient temperatures where there is a possibility of a hot spot which might damage lower rated wire such as PVC or PFA
- By using multipair, the problem of having many unwieldy single pair wire is eliminated
- Available with and without stainless steel braid in the more popular conductor combinations



Fiberglass Multipair

Multipairs of **stranded** 20AWG diameter conductors double glass fiber lapped, braided and varnished. Pairs twisted, glass fiber braided and varnished, bunched, braided and varnished overall.



Fiberglass Multipair with Stainless Steel Braid

Multipairs of **stranded** 20AWG diameter conductors double glass fiber lapped, braided and varnished. Pairs twisted, glass fiber braided and varnished, bunched, braided and varnished with overall stainless steel braid.

Stock Number		CM1402	CM1403	CM1406	CM1412	CM1402/SSB	CM1403/SSB	CM1406/SSB	CM1412/SSB
CONDUCTORS	Wire Type (number of strands x AWG)	14x32	14x32	14x32	14x32	14x32	14x32	14x32	14x32
	Total Wire Size - AWG (S = Stranded)	21S	21S	21S	21S	21S	21S	21S	21S
	Total Area (mm ²)	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
	Insulation	Fiberglass				Fiberglass			
PAIRS	Number of Pairs	2	3	6	12	2	3	6	12
	Conductor Configuration	Twisted				Twisted			
	Shielded	No				No			
OVERALL	Insulation	Fiberglass				Fiberglass			
	Insulation Rating (°F)	Continuous				Continuous			
		+900				+900			
	Short Term	+1000				+1000			
		+1000				+1000			
	Color Coding	Yes				Yes			
	Shielded	No				Yes			
	Physical Properties	Abrasion Resistance				Good			
		Fair				Good			
		Moisture Resistance				None			
	Typical Weight (lbs/1000ft) (excluding reel)	41	62	96	150	55	82	123	184
Diameter under Armor (inches)		—				—			
Diameter over Armor (inches)		—				—			
Overall Diameter† (inches)		0.16"	0.24"	0.35"	0.55"	0.24"	0.31"	0.43"	0.63"

Notes

Impregnation retained up to 350°F. Above this temperature the integrity of the wire is maintained to the upper insulation rating limit provided the wire is not flexed particularly when cold.

* Where wire incorporate a metal braid, the braid can be used as a shield.

† These values are nominal and if critical to your application, please request a physical check.

The wire constructions can also be manufactured to any other color coding requirement that you may have, but might be subject to a minimum ordering quantity. If you have any specific requirements regarding wire lengths please let us know so that we may make a satisfactory offer to meet your needs.

Color Codes available Extension Grade to ANSI MC96.1



ALSO AVAILABLE as Thermocouple Grade to ANSI MC96.1



Order Code - Example

Stock No.	Thermocouple Type	Color Code
CM1406	- KX	- ANSI

Thermocouple wire is available in the following types: KX, JX, TX, NX, EX, SX or RX. Other less popular thermocouple types are available on request.

Thermocouple wire is normally available from us for **immediate** delivery from stock to ANSI MC96.1 colour coding.

IEC colors are available on request



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Issue Number: 0321

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